

Supplemental Table 1. Summary of Data Sources Used for Tracking Educational Pathways

Check point	Cohort of Interest	Source	Source limitations	Source Details	Associated Figures and Charts
Public and private high school graduates in 2009	All graduates from public and private high schools	Digest of Education Statistics and Private School Universe Survey	The data available to us does not count 'other US citizens' in high school graduation data. We estimated the number of private school graduates of each ethnic group based on minority demographics at all schools and the total number of private high school graduates in 2009.	Digest of Education Statistics, 2011 Tables and Figures, Table 114, (https://nces.ed.gov/programs/digest/d11/tables/dt11_114.asp), Private School Universe Survey high school data, https://nces.ed.gov/surveys/pss/tables0910.asp (Table 13 and Table 9)	Chart 1a and Chart 1b
Estimated enrollment in 2 year and 4 year colleges by recent high school completers all institutions (in 2009)	Estimated college matriculant size based on the number of high school graduates and the demographics of the recent high school completers enrolled in 2 and 4 year colleges in 2009.	U.S. Department of Education, National Center for Education Statistics		U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "NCES Common Core of Data State Dropout and Completion Data File,"School Year 2009–10, Table 2 and U.S. Department of Education, Digest of Education Statistics, Table 302.20 "Percentage of recent high school completers enrolled in 2- and 4-year colleges, by race/ethnicity: 1960 through 2014" (https://nces.ed.gov/programs/digest/d15/tables/dt15_302.20.asp)	Chart 1a and Chart 1b
Estimated freshmen who intend to major in Biological/Agricultural Sciences (2009)	Calculated population based size of entering class from above and percentage of those intending to major in biological or agricultural sciences	National Science Board, Science and Engineering Indicators (2014)	Weighted by population for the URM (black, American Indian, and Hispanic). Assume 10.4% of those who are Other US citizens.	https://www.nsf.gov/statistics/2016/nsb20161/#/data , Appendix Table 2-16 Original source: Higher Education Research Institute, University of California at Los Angeles, Survey of the American Freshman: National Norms, special tabulations (2013). Weighted by population for the URM (Black, Hispanic, and American Indian)	Chart 1a, Chart 1b, Supplemental Figure 2, and Supplemental Figure 3
Students who earn a bachelors in a Biological Sciences (2013)	B.S. in Biological Sciences	National Science Board's Science and Engineering Indicators 2016.	These numbers do not include those who completed a bachelors degree in agricultural science. We are aware of this unequal comparison within the cohort.	National Science Board's Science and Engineering Indicators 2016. https://www.nsf.gov/statistics/2016/nsb20161/#/data , Appendix Table 2-18	Chart 1a, Chart 1b, Figure 1, Supplemental Figure 3

Career Stage	Cohort of Interest	Data Source	Method for Focused Cohort	Source Details	Associated Figures and Charts
Population of earned bachelors degrees in biological sciences	Biological sciences bachelor's degree earners	NSF (Survey of Earned Doctorates)	Direct from appendix table	Science & Engineering Indicators 2016. https://www.nsf.gov/statistics/2016/nsb20161/#/data , Appendix Table 2-18.	Chart 1a, Chart 1b, Figure 1, Figure 6

Estimated number of doctoral students enrolled in biological sciences programs	Biological sciences doctoral students	NSF (Survey of Earned Doctorates)	Subtracting the biological sciences masters degrees earned in the current year and subsequent year from the total graduate enrollment in graduate programs in biological sciences.	Science & Engineering Indicators 2016. https://www.nsf.gov/statistics/2016/nsb20161/#/	Figure 2, Figure 6 data, Appendix tables 2-26 and 2-29
Earned doctorates in biological sciences programs	Biological sciences doctoral recipients	NSF (Survey of Earned Doctorates)	Direct from appendix table	Science & Engineering Indicators 2016. https://www.nsf.gov/statistics/2016/nsb20161/#/	Figure 3, Figure 6 data, Appendix tables 2-30
Earned doctorates in biomedical research fields	Doctoral recipients from basic science biomedical research fields	NSF (Survey of Earned Doctorates)	Subtracted the graduates from the fields of Botany, Epidemiology, Ecology, Biostatistics, Entomology, Evolutionary biology, Nutrition sciences, and Zoology	National Science Foundation, National Center for Science and Engineering Statistics, Survey of Earned Doctorates (2009, App. Tab. 20), (2010, App. Tab. 22), (2011, App. Tab. 22), (2013, App. Tab. 22), (2014, App. Tab. 22), (2015, App. Tab. 22)	Figure 4, Figure 6
Postdocs in Life Sciences	Postdoctoral fellows who completed a doctorate at a US institution who are now working in a academic institution in the Life Sciences	NSF (Survey of Doctoral Recipients)	Direct from appendix table	National Science Board. Science & Engineering Indicators 2016. National Science Foundation. Washington, DC. https://www.nsf.gov/statistics/2016/nsb20161/#/	Figure 5, Figure 6 data, Appendix Table 5-15.